

# AMERICAN SOCIETY of MECHANICAL ENGINEER'S GUIDE For LEAK CLASSIFICATION

All found leakage is prioritized using a system of 1, 2, or 3 depending on migration/severity, using the American Society of Mechanical Engineer's Guide for Leak Classification. All samples of methane/natural gas are measured by a quantitative flame ionization detector with readout capabilities from 1 part per million to 10 percent concentration by volume of methane/natural gas in air.

## **Priority 1:**

A leak that presents an existing or probable concern to the public or property and requires immediate attention. Repairs should be continuous to alleviate all hazardous conditions. Examples may be but are not limited to:

- A) Leakage with indications at building foundation.
- B) Audible or noticeable ambient air odor.
- C) Leakage with indications over three percent in substructures that people can enter or enclosures containing electric equipment.

## **Priority 2:**

A leak that is non-hazardous at the time of detection but justifies monitoring to prevent future hazard. Priority 2 leaks may vary greatly in severity. Some Priority 2 leaks will justify various monitoring schedules. The frequency of monitoring will be determined by the location and magnitude of the leakage condition. Examples may be but are not limited to:

- A) Leakage that has gas indications within five feet of structures if unpaved or ten feet if paved.
- B) Leakage found on plastic piping.
- C) Leakage with an excessive migration pattern.
- D) Leakage with indications under three percent in substructures that people can enter or enclosures containing electrical equipment.

## **Priority 3:**

A leak that is non-hazardous at the time of the assessment and is expected to remain non-hazardous. Examples may be but are not limited to:

- A) Leakage that is not considered as Priority 1 or Priority 2.
- B) Leakage should be re-evaluated during the next scheduled assessment or within 15 months of the date reported, whichever occurs first, until the leak is re-evaluated or no longer results in a reading.